

Name: \_\_\_\_\_  
Mr. Willis  
Biology: \_\_\_\_\_  
Date: \_\_\_\_\_

Unit I  
Biology – The Nature of Science  
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I

## The Wonder of Seed: Germination and Seedling Growth Inquiry

This investigation introduces students to National Science Education Standards biology content using research as the framework. By forming a question, devising an experiment to test a hypothesis, then conducting and analyzing an experiment, students practice thinking and working like a scientist and grasp the elements of sound research skills while exploring the topic.

Essential Inquiry Questions:

- What role do seeds play in supporting life on Earth?
- How does a sprout develop from a seed?
- What are the characteristics of seed germination and seedling growth?
- What role does the environment play (biotic and abiotic) in seed germination and growth?

Think of three questions that your group would like to investigate. Write each one on a 3" x 5" index card. As a group put the questions in order from the one you'd like to investigate the most. Write them here. (Ex. How does Diet Coke affect the germination of Mung Bean seeds?).

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

Unit I – Biology – The Nature of Science – Observations

Research each question and list at least three facts about each question that will help the group develop an experiment to answer the question.

**Question 1 Facts**

1. \_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_

**Question 2 Facts**

1. \_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_

**Question 3 Facts**

1. \_\_\_\_\_  
\_\_\_\_\_

2. \_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_